Devi Ahilya University, Indore, India Institute of Engineering & Technology				I Year M.E.(Industrial Engineering and Management) Full Time			
Subject Code & Name	**Instructions Hours per Week**			**Credits**			
IMR1C1 PRODUCTIVITY AND TECHNOLOGY MANAGEMENT.	**L**	**T**	**P**	**L**	**T**	**P**	**Total**
	3	**1**	**1**	**3**	**1**	**1**	**5**
Duration of Theory Paper: 3 Hours							

Objectives & Pre requisites: To impart the basics of Productivity Concepts, to refine the skills of Workplace design through Work Study, Job Evaluation, etc. To develop the skills of Technology management through different technology transfer.

COURSE CONTENTS

UNIT-1

Productivity:

Productivity, Introduction, types of productivity, methods to improve productivity.
Introduction to work study, method study, definition, importance, selection, recording, different recording techniques, principal of motion economy.

UNIT-2

Work Measurement:

Introduction to work measurement, time study, Steps in time study. Various techniques to measure time, slandered time, normal time, observed time. Allowances, measurement & significance. Work sampling, introduction & importance

UNIT-3

Job Evaluation:

Job evaluation and merit rating, introduction to job evaluation, various method of job evaluation, importance of job evaluation.

UNIT-4

Technology Management:

Introduction to technology, technology management, importance of technology management, know how of technology, know why of technology, dimensions of technology management Technology life cycle, syndication diffusion.

UNIT-5

Technology Transfer

Technology forecasting, introduction, importance, absorption & adoption, generation of technology, method of technology transfer, technology transfer modes, technology diffusion, importance. Technology requirement for India, strategies for the companies in the changing environment. Case studies.

BOOKS RECOMMENDED:

[1]. Dhawan, *Productivity and Technology Management.*2002
[2]. I.L.O, *Work Study*. 2004
[3]. Branes K.M, *Time & Motion Study*.
[4]. Farland Mc, *Management –Principal and Practice*. .Dec 1990
[5]. Dr. Sushil, *Technology Management.* New Delhi Vikas, 2001

LABORATORY EXPERIMENTS:

1. Study and analysis of Differrent produtivity Measures relted to specific industries.
2. Study and analysis of different Recoding techniques for a given pocess.
3. Estimation of Standard Time for a given Job, Process and its comparison with relevent industry data.
4. Study and Analysis of Job Evaluation process and its compraison with related industry.
5. Study of Technology Transfer process with special cases of indusries or service organisation.
6. Study of Technology Forescating methods and their applications in Indian context.
7. Case studies.